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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/760,587	01/21/2004	Atsushi Kitamura	118402	1117	
25944	7590 03/28/2006	EXAMINER		INER	
OLIFF & BERRIDGE, PLC		•	DUNWIDDIE, MEGHAN K		
P.O. BOX 199 ALEXANDR	928 [A, VA 22320		ART UNIT	PAPER NUMBER	
,			2875	2875	
			DATE MAIL ED. 02/20/2000		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
	10/760,587	KITAMURA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Meghan K. Dunwiddie	2875				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 07 De	ecember 2005.					
,— ,	action is non-final.					
3) Since this application is in condition for allowar	ice except for formal matters, pro	secution as to the merits is				
, , , ,	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Discussificance (Olabora						
Disposition of Claims						
4) Claim(s) <u>1-10</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,3 and 4</u> is/are rejected.						
7)⊠ Claim(s) <u>2 and 5-10</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.	•				
Application Papers						
9) The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>07 December 2005</u> is/a	re: a)⊠ accepted or b)⊡ object	ed to by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	₃ 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. ☐ Certified copies of the priority documents	s have been received.					
2. Certified copies of the priority documents		on No.				
, , ,	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date	6) Other:	- Personal Control of the Control of				

#### **DETAILED ACTION**

This Office Action is a Non-Final Rejection in response to the amendment received on December 7, 2005 by **Kitamura** et al.

### Response to Arguments

1. Applicant's arguments, see pages 5-7, filed December 7, 2005, with respect to the rejection(s) of claim(s) 1-5 under **Kunimochi** et al. (US 2003/0117792) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **Akaoka** (US 2002/0135560) and **Min** et al. (US 2004/0130880).

### Drawings

2. The drawings were received on December 7, 2005. These drawings are acceptable.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 3, 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Akaoka (US 2002/0135560) in view of Min et al. (US 2004/0130880).

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5. Regarding Claim 1, **Akaoka** shows a spread illuminating apparatus comprising:

At least one light source [Figure 1: (4)];

 A light conductive plate which allows light emitted from the at least one light source and introduced thereinto to exit out from at least one of two major surfaces thereof respectively toward at least one object to be illuminated [Figure 1: (2)];

And a light converging means [Figure 1: (3)] having a refractive index profile in a
direction orthogonal to the two major surfaces of the light conductive plate
[Figure 2: (3a-3e)].

6. Regarding Claim 3, **Akaoka** shows:

 The light converging means has a height substantially equal to a thickness of the light conductive plate toward the one end surface [See Figure 1].

7. Akaoka does not show:

 A light converging means which is disposed between the at least one light source and the light conductive plate.

8. Min et al. teaches:

 A light converging means [Figure 6: (220)] which is disposed between the at least one light source [Figure 6: (120)] and the light conductive plate [Figure 6: (110)]. Application/Control Number: 10/760,587 Page 4

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9. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the spread illuminating apparatus of **Akaoka** with a light converging means disposed between the light source and the light conductive plate as taught by **Min** et al. for the purpose and advantage of converting the light input to a surface light and emitting the surface light in a direction towards the light conductive plate.

- 10. Regarding Claim 4, **Akaoka** shows the claimed invention as cited above, but does not specifically teach the light converging means having its light entrance surface and its light exit surface oriented parallel to each other.
- 11. Min et al. teaches:
  - The light converging means has its light entrance surface and its light exit surface oriented parallel to each other [Figure 6: (200 and 120)].
- 12. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide the spread illuminating apparatus of **Akaoka** with the light converging means having its light entrance surface and its light exit surface oriented parallel to each other as taught by **Min** et al. for the purpose and advantage of emitting light from the light source which is fully and effectively utilized for a brighter illumination with a similar power consumption and also to allow for downsizing of the apparatus.

**MKD** 

#### Allowable Subject Matter

13. Claims 2 and 5-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is (571) 272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

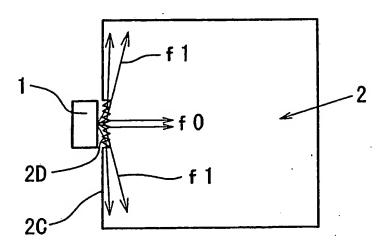
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571)272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slephen Husar Primary Examiner

OK MKD 03/17/06

Fig. 8 Conventional Art





DK MKB 03/17/06

